

Dominion Resources Services, Inc  
5000 Dominion Blvd.  
Glenn Allen, Va 23060

Attn: Mr. Mike Glagola

Re: 4493 US 301 Hwy  
Pleasant Hill, North Carolina

Dear Mr. Glagola,

It is my pleasure to offer this proposal for a dewatering pilot test for the Possum Point Power Station Ash Pond "E" Closure. This letter will detail the expected cost associate with the detailed task.

Our services for this project will be to assist GAI and Dominion on gathering the necessary data to allow for a proper dewatering design for Pond "E".

#### **Well Point Pilot Test**

The purpose of this test is to determine how impounded fly ash in Pond E reacts to dewatering and how dewatering affects fly ash pore pressure, stability, and excavatability.

The test is proposed to take place in the north western edge of the pond (this should be the finest material). The test will consist of the following:

1. Twenty-one (21) conventionally filtered (washed concrete sand) equally spaced wellpoints jetted in a single 100-foot long line.
2. Two wellpoints filtered with fabric and no granular material.
3. Five piezometers installed as wellpoints perpendicular to the wellpoint line.
4. Four tensiometer clusters installed between the piezometers. Each cluster will contain three instruments at approximate depths of 5, 10, and 15 feet below ground surface.
5. Testing of the water

The pond water will be used for jetting in well points and piezometers. The water pumped out of the well will be released into Pond "E".

Total Cost: \$170,000.00

#### **Learning Objective**

- Determine the in-situ hydraulic conductivity and Transmissivity
- Determine the Radius of Drawdown
- Determine the Storage Coefficient
- Determine the pumping rate to size a treatment system
- Determine the constituents that make up the pore water of the ash. Testing will show the make-up of the water as well as the efficiency of the screen to reduce the amount of pollutants in the water.



### **Rim Ditch Test**

The purpose of this test is to determine how impounded fly ash in Pond E will react to a rim ditch and how the ditch will affect the stability.

The test is proposed to take place across the center and edge of Pond “E”, this will show the distribution and behavior of both bottom and fly ash in the pond. The test will consist of the following digging with a Cat 320 Excavator a rim ditch in Pond “E”. Samples of the ash will be taken along the length of the ditch to retrieve grain size data. The water will not be discharged from the pond until directed by Dominion. Water samples will be taken for testing.

Total Cost: \$30,000.00

### **Learning Objectives**

- Determine the best means and methods to dewater the ash at Possum Point.
- Determine the possible flow from open ditch and sump methods.
- Determine the stability of the ash as water flows through.
- Determine the stability of the ash in an open cut when the ash is not completely dewatered (by digging test pits).
- Grab samples will be taken to determine grain size and hydraulic conductivity (through test pits).
- Determine what constituents make up the pore water of the ash. The test will determine the amount of RCRA Metals, Mercury, Total Suspended Solids, Total Solids, as well as the pH.

### **Deep Well Test**

The purpose of this test is to determine the communication between the underlying aquifer and the ash impounded in Pond “E”. This will allow us to determine if the pond will experience recharge from underlying aquifer. The test will include mobilization of a deep well drill, installation of a deep well, development of well, and installation of instrumentation.

Total Cost: \$40,000.00

### **Learning Objective**

- Determine the in-situ hydraulic conductivity and Transmissivity
- Determine the Radius of Drawdown
- Determine the Storage Coefficient
- Determine the pumping rate to size a treatment system
- Determine the communication between the underlying aquifer and the ash
- Determine the drawdown in the ash by a deep well system

Please take time to review this quote and contact me with any questions.

Thank You,  
John Glover

